

WHAT IS CLAIMED IS

1. A circuit termination method of a
circuit terminating apparatus with a terminal side
5 interface of a frame synchronization method taking a
multi frame configuration, comprising:
updating a transmission speed according to
a condition of a circuit between a first circuit
terminating apparatus and a second circuit
10 termination apparatus,
performing a service suspension and
resumption of a predetermined bit position common to
each frame of the multi frame, and
adjusting inputting speed and outputting
15 speed of a terminal connected to the first circuit
terminating apparatus to the updated transmission
speed between the first circuit terminating
apparatus and the second circuit terminating
apparatus.
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2. A circuit termination method of a
circuit terminating apparatus with a terminal side
interface of a frame synchronization method taking a
multi frame configuration, comprising:
25 updating a transmission speed according to
a condition of a circuit between a first circuit
terminating apparatus and a second circuit
termination apparatus,
performing a service suspension and
30 resumption of a continuous bit string of a
predetermined length starting from a predetermined
bit position of a predetermined frame of the multi
frame, and
adjusting an inputting speed and an
35 outputting speed of a terminal connected to the
first circuit terminating apparatus to the updated
transmission speed between the first circuit

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terminating apparatus and the second circuit terminating apparatus.

3. A circuit termination method of a
5 circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

checking whether a synchronous speed
established by a first circuit terminating apparatus
10 and a second circuit terminating apparatus at an operation start is faster or slower than a contracted speed of a terminal connected to the first circuit terminating apparatus,

performing a service suspension and
15 resumption of a predetermined bit position common to each frame of the multi frame to update the synchronous speed, if the established synchronous speed is slower than the contracted speed, and

adjusting an inputting speed and an
20 outputting speed of the terminal to the updated speed between the first circuit terminating apparatus and the second circuit terminating apparatus.

25 4. A circuit termination method of a circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

checking whether a synchronous speed
30 established by a first circuit terminating apparatus and a second circuit terminating apparatus at an operation start is faster or slower than a contracted speed of a terminal connected to the first circuit terminating apparatus,

35 performing a service suspension and resumption of a continuous bit string of a predetermined length starting from a predetermined

bit position of a predetermined frame of the multi frame to update the synchronous speed, if the established synchronous speed is slower than the contracted speed, and

- 5 adjusting an inputting speed and an outputting speed of the terminal to the updated speed between the first circuit terminating apparatus and the second circuit terminating apparatus.

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5. A circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

- 15 a service control unit which generates a clock pulse, and performs a service suspension according to user conditions and circuit conditions, said service control unit performing a service suspension and resumption of a predetermined bit position common to each frame of the multi frame
- 20 when a transmission speed needs to be updated due to a change in circuit conditions between a first circuit terminating apparatus and a second circuit terminating apparatus, and adjusting an inputting
- 25 speed and an outputting speed of a terminal connected to the first circuit terminating apparatus to the updated transmission speed between the first circuit terminating apparatus and the second circuit terminating apparatus.

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6. A circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

- 35 a service control unit which generates a clock pulse, and performs a service suspension according to user conditions and circuit conditions,

said service control unit performing a service suspension and resumption of a continuous bit string with a predetermined bit length starting from a predetermined bit position of a predetermined frame of the multi frame when a transmission speed needs to be updated due to a change in circuit conditions between a first circuit terminating apparatus and a second circuit terminating apparatus, and adjusting an inputting speed and an outputting speed of a terminal connected to the first circuit terminating apparatus to the updated transmission speed between the first circuit terminating apparatus and the second circuit terminating apparatus.

15 7. A circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

20 a service control unit which generates a clock pulse, and performs a service suspension according to user conditions and circuit conditions, said service control unit checking whether a synchronous speed established between a first circuit terminating apparatus and a second circuit terminating apparatus at starting operation is faster than a contracted speed of a terminal connected to the first circuit terminating apparatus, performing a service suspension and resumption of a predetermined bit position common to each frame of the multi frame to update the synchronous speed, if the established synchronous speed is below the contracted speed, and adjusting an inputting speed and an outputting speed of the terminal to the updated speed established between the first circuit terminating apparatus and the second circuit terminating apparatus.

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8. A circuit terminating apparatus with a terminal side interface of a frame synchronization method taking a multi frame configuration, comprising:

- 5 a service control unit which generates a clock pulse, and performs a service suspension according to user conditions and circuit conditions, said service control unit checking whether a synchronous speed established by the circuit
- 10 terminating apparatus and a second circuit terminating apparatus at starting operation is faster than a contracted speed of a terminal connected to the first circuit terminating apparatus, performing a service suspension and resumption of a
- 15 continuous bit string of a predetermined bit length starting from a predetermined bit position of a predetermined frame of the multi frame to update the synchronous speed, if the established synchronous speed is below the contracted speed, and adjusting
- 20 an inputting speed and an outputting speed of the terminal to the updated speed established between the first circuit terminating apparatus and the second circuit terminating apparatus.

- 25 9. The circuit termination method as claimed in claim 1, wherein a re-negotiation is performed between the first circuit terminating apparatus and the second circuit terminating apparatus starting from a speed faster than a
- 30 contracted speed of the terminal connected to the first circuit terminating apparatus when the first circuit terminating apparatus detects a specific pattern transmitted from the terminal connected to the first circuit terminating apparatus.

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10. The circuit termination method as claimed in claim 1, wherein a re-negotiation is

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performed between the first circuit terminating apparatus and the second circuit terminating apparatus starting from a speed faster than a contracted speed of the terminal connected to the first circuit terminating apparatus when frame synchronization between the first circuit terminating apparatus and the second circuit terminating apparatus monitored is lost for a period longer than a predetermined period.

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11. The circuit termination method as claimed in claim 1, wherein a re-negotiation is performed between the first circuit terminating apparatus and the second circuit terminating apparatus starting from a speed faster than a contracted speed of the terminal connected to the first circuit terminating apparatus when frame synchronization between the first circuit terminating apparatus and the second circuit terminating apparatus monitored is lost for a period longer than a predetermined period, and the synchronization is established again for a period longer than a predetermined period.

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12. The circuit terminating apparatus as claimed in claim 5, comprising a specific pattern detecting unit which detects a specific pattern, thereby when the first circuit terminating apparatus detects the specific pattern that the terminal connected to the first circuit terminating apparatus transmits, the first circuit terminating apparatus establishes synchronization again with the second circuit terminating apparatus starting from a transmission speed faster than a contracted speed of the terminal connected to the first circuit terminating apparatus.

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13. The circuit terminating apparatus as claimed in claim 5, comprising a synchronization monitoring unit that monitors a synchronization status, thereby when the synchronization is lost for
5 a period longer than a predetermined period, the first circuit terminating apparatus establishes synchronization again with the second circuit terminating apparatus starting from a transmission speed faster than a contracted speed of the terminal
10 connected to the first circuit terminating apparatus.

14. The circuit terminating apparatus as claimed in claim 5, comprising a synchronization monitoring unit that monitors a synchronization
15 status, thereby when the synchronization is lost for a period longer than a predetermined period and when afterwards synchronization is re-established and maintained for a period longer than a predetermined period, the first circuit terminating apparatus
20 establishes synchronization again with the second circuit terminating apparatus starting from a transmission speed faster than a contracted speed of the terminal connected to the first circuit terminating apparatus.

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